

Applicant : Jeffrey H. Burns
Appln. No. : 10/679,752
Page : 4

REMARKS

Claims 1-4 have been amended, claims 6-7 and 10-20 have been canceled, and claim 21 has been added. Thus, upon entry of the above amendments, claims 1-5, 8, 9 and 21 will be pending and under consideration in the above-identified application.

Prior Art Rejection

Claims 1, 8, 9 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada et al. (US 2001/0050717) in view of Wolterink et al. (US 2006/0044450).

The amended claims distinguish over the combined teachings of Yamada in view of Wolterink et al. by requiring, among other things, an optically transmissive medium filling space between the integrated circuit and the optically transmissive substrate. This feature is neither taught nor suggested by either of the applied references, either individually or in combination. Rather, Yamada et al. discloses a device requiring an image pick-up opening 22 between filter 24 and pick-up semiconductor 4. See, for example, paragraphs 10 and 41, and claim 1. Wolterink et al. require a micro-spacer layer 225 between wafer 215 and cover glass layer 235. See paragraph 63 and claim 1. Accordingly, the features of the claimed invention are directly contrary to the teachings of both Yamada et al. and Wolterink et al. Thus, the claims are directed to subject matter that would not have been obvious under 35 U.S.C. §103(a) based on Yamada et al. in view of Wolterink et al.

Claims 2-5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada et al. in view of Wolterink et al. as applied to claim 1 above, and further in view of Melman et al. (US 6,564,018).

Dependent claims 2-5 are allowable for at least the reasons set forth above with respect to independent claim 1.

Support for the amendments to claim 1 can be found at paragraph 10, which states that the substrate includes filter material; page 22, which shows that “[c]ircuit members 14 may include a resiliently compressible circuit;” FIGs. 1 and 2, which show integrated circuit 16 coupled to and mounted directly on the electrical circuit 14 by an electrical connector between the pads on the integrated circuit and leads on the electrical circuit; and at paragraph 24 and

Applicant : Jeffrey H. Burns
Appln. No. : 10/679,752
Page : 5

FIGs. 1 and 2, which show and describe a device as claimed having an optically transmissive medium 32 filling space between integrated circuit 16 and optically transmissive substrate 12.

Discussion Of Previously Applied References

It is respectfully submitted that the amended claims also distinguish over the previously applied references. For example, Melman '018 does not have a circuit with leads on a transparent substrate and an integrated circuit having an optical imaging element and pads that are electrically coupled to the leads on the circuit. Instead, Melman '018 teaches a sub-assembly including sensor 116 glued to a cover glass 806 having IR absorbing material, and a support element 102 holding the sub-assembly.

Hsin '740 does not have an integrated circuit having an optical imaging element and pads that are electrically coupled to and mounted directly on an electrical circuit disposed on an optically transmissive substrate. Instead, Hsin '740 teaches additional elements, including an opaque substrate 54.

The remaining references which have been made of record neither anticipate nor make obvious the claimed invention.

Further, none of the references of record disclose or provide a reason for providing an optical sensor circuit assembly in which space between an integrated circuit having an optical imaging element, and an optically transmissive substrate, is filled with an optically transmissive medium. Rather, the reference generally teaches against the claimed invention.

CONCLUSION

It is submitted that the application is now in condition for allowance and notice of the same is requested.

Respectfully submitted,

June 2, 2008

Date

GJE/dac

/Gunter J. Evanina/

Gunter J. Evanina, Registration No. 35 502
Price, Heneveld, Cooper, DeWitt & Litton, LLP
695 Kenmoor, S.E.
Post Office Box 2567
Grand Rapids, Michigan 49501
(616) 949-9610